

WHAT IS CLAIMED IS:

1. An image pickup apparatus comprising:

an image pickup means for outputting an image  
signal having a first number of pixels which is greater  
5 than a predetermined number of pixels;

a converting means for converting the image signal  
having the first number of pixels, outputted from said  
image pickup means, into an image signal having the  
predetermined number of pixels;

10 a first memory having storage capacity  
corresponding to the predetermined number of pixels,  
for storing the image signal having the predetermined  
number of pixels, outputted from said converting means;

a second memory having storage capacity  
15 corresponding to the first number of pixels, for  
storing the image signal having the first number of  
pixels, outputted from said image pickup means; and

still image processing means for outputting as  
still image data the image signal having the first  
20 number of pixels, read out from said second memory.

2. An apparatus according to claim 1, wherein  
said converting means, said first memory and said still  
image processing means are provided on a same  
25 integrated circuit, and said second memory is built as  
a separate circuit from said integrated circuit.

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3. An apparatus according to claim 2, further comprising special effect means for performing a special effect processing on the image signal having the predetermined number of pixels, stored in said first memory and outputting the thus-processed image signal, wherein said special effect means is provided on said integrated circuit.

4. An apparatus according to claim 2, further comprising output means for converting the image signal having the predetermined number of pixels, stored in said first memory into a predetermined format and outputting the thus-converted image signal, wherein said output means is provided on said integrated circuit.

5. An apparatus according to claim 1, further comprising recording means for recording onto a recording medium the image signal read out from said first memory, wherein the predetermined number of pixels is a number of pixels determined in accordance with a recording format of said recording means.

6. An apparatus according to claim 1, wherein said still image processing means includes encoding means for encoding the image signal outputted from said second memory and compressing an amount of information

of the image signal.

7. An apparatus according to claim 1, wherein  
said still image processing apparatus includes a moving  
5 image processing mode and a still image processing  
mode, wherein in the moving image processing mode, said  
image pickup means adds together signals of pixels of  
vertically-adjacent lines of image pickup elements and  
reads out the added signals, and in the still image  
10 processing mode, said image pickup means reads out the  
signal of each line of the image pickup elements  
independently.

8. An apparatus according to claim 1, further  
15 comprising:

moving image processing means for reading out from  
said first memory an image signal having the  
predetermined number of pixels and outputting the read-  
out image signal as moving image data;

20 first recording means for recording to a first  
recording medium the moving image data outputted from  
said moving image processing means; and

second recording means for recording to a second  
recording medium, which is different from the first  
25 recording medium, the moving image data outputted from  
said still image processing means.

9. An apparatus according to claim 8, wherein the first recording medium is a magnetic tape, and the second recording medium is a memory card.

5           10. An image processing apparatus comprising:  
            an input unit arranged to input an image signal  
            having a first number of pixels which is greater than a  
            predetermined number of pixels;

10        a conversion circuit arranged to convert the  
inputted image signal having the first number of pixels  
into an image signal having the predetermined number of  
pixels;

a first memory having storage capacity sufficient for the predetermined number of pixels, arranged to store the image signal having the predetermined number of pixels, outputted from said conversion circuit;

a memory interface arranged to write into a second memory having a storage capacity corresponding to the first number of pixels, the image signal having the first number of pixels, outputted from the input unit, and read out from said second memory the image signal having the first number of pixels; and

a still image processing circuit arranged to  
output as still image data the image signal having the  
first number of pixels, read out by the memory  
interface, wherein said input unit, said conversion  
circuit, said first memory, said memory interface and

said still image processing circuit are provided on a same integrated circuit, and said second memory is built as a circuit different from said integrated circuit.

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11. An image pickup apparatus comprising:

an image pickup means for outputting an image signal having a first number of pixels which is greater than a predetermined number of pixels;

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converting means for converting the image signal, having the first number of pixels, outputted from said image pickup means into an image signal having the predetermined number of pixels;

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a first memory for storing the image signal having the predetermined number of pixels;

a second memory for storing the image signal having the first number of pixels;

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a memory interface for writing to said first memory the image signal having the predetermined number of pixels, outputted from the converting means, reading out from said first memory the image signal having the predetermined number of pixels, writing into said second memory the image signal having the first number of pixels, outputted from the inputted image pickup means, reading out from said second memory the image signal having the first number of pixels;

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moving image processing means for outputting as

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moving image data the image signal having the  
predetermined number of pixels, read out from the first  
memory; and

still image processing means for outputting as  
5 still image data the image signal having the first  
number of pixels, read out from the second memory,  
wherein said converting means, said memory interface,  
said moving image processing means and said still image  
processing means are provided on a same integrated  
10 circuit, and said first memory and said second memory  
are each built as independent circuits from said  
integrated circuit.

12. An apparatus according to claim 11, further  
15 comprising:

first recording means for recording onto a first  
recording medium the moving image data outputted from  
said moving image processing means; and

second recording means for recording the moving  
20 image data outputted from said still image processing  
means onto a second recording medium which is different  
from the first recording medium.

13. An apparatus according to claim 12, wherein  
25 the first recording medium is a magnetic tape, and  
the second recording medium is a memory card.

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14. An image processing apparatus comprising:

an input unit arranged to input an image signal having a first number of pixels which is greater than a predetermined number of pixels;

5 a conversion circuit arranged to convert the image signal having the first number of pixels, outputted from the input unit, into an image signal having the predetermined number of pixels;

10 a memory interface arranged to write into a first memory for a moving image the image signal having the predetermined number of pixels, outputted from said conversion circuit, read out the image signal having the predetermined number of pixels from said first memory, write into a second memory the image signal having the first number of pixels, outputted from the input unit, and read out from said second memory the image signal having the first number of pixels;

15 a moving image processing circuit arranged to output as moving image data the image signal having the predetermined number of pixels, read out from said first memory; and

20 a still image processing circuit arranged to output as still image data the image signal having the first number of pixels, read out from the second memory, wherein said input unit, said conversion circuit, said memory interface, said moving image processing circuit and said still image processing

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